## PRESERVING WOOD WINDOWS



Restoration | Energy Efficiency | Functionality | Historical | Preservation | Reproduction



MODERN | VINTAGE | HISTORICAL

#### Who We Are

Chosen Wood Window Maintenance is a premier full-service wood window restoration contractor. For a fraction of the cost of window replacement, we can repair and update your wood windows. Our company offers a variety of services such as glass replacement, wood damage repair, dry rot repair, inoperable sash repair, glazing, energy solutions, reproductions, historical preservation, and more.

Share your project goals with us, and we will offer our guidance, options, and alternatives, complete with an ROM for your project. We are proven experts in our field whose goal is to provide the best value for your money and restoring your wood windows will do that. At Chosen Wood Window Maintenance, we emphasize quality craftsmanship above all, and are flexible enough to fit operations into many different time constraints. Our diverse project history has equipped us with the knowledge and skills to work in a number of different job environments.

#### Mission Statement

Our mission is to provide quality services and products that accommodate our customers' specific needs. We aim to preserve and provide quality materials, builds, and restoration methods that enhance a building's unique character.



If your project is seeking Leadership in Energy and Environmental Design (LEED) qualification, we can tailor our methods and products to your certain needs. We are knowledgeable in selecting, procuring, and utilizing products that can meet strict V.O.C. requirements, as well as products harvested or manufactured with the geographic boundaries set forth as LEED qualifying.

#### A Green Company

Chosen Wood Window Maintenance is a green company. We hate to see valuable wood windows go to waste. More often than not, replacing windows is a poor economic and environmental decision. It is our goal to educate on the value of saving your wood windows which, in turn, will save you money and retain the value of your architecture.



#### **Origins**

Chosen Wood Window Maintenance was founded by Vern Forrest in 1998. He founded Chosen Wood Window Maintenance for one reason — to on-site rebuild failing pine windows. The service was extremely popular, and we have expanded from rebuilding pine windows to launching a full line of products and services for modern, vintage, and Historical wood windows.

## Value of Restoration

#### Styling

Original vintage windows fit the vintage building they're in. Care was taken to match the weight and style of window to the building, the trim, etc. The building can seem at odds with itself and its surroundings if the original windows don't match styling features.

#### **Quality Materials**

vintage wood windows are constructed of old growth timber. The wood is much denser and more weather resistant than today's tree farmed softwoods. Detailed profiles are possible because of the density of the wood. The reason these windows are still around, even with years of neglect, is because the wood is of very high quality requiring no cladding or additional materials to give them weather resistance. Minus all the ugly paint your wood windows are usually quite beautiful, graceful, and strong.





#### **Proven Performers**

Chances are your windows have done their job for 50-100 or more years already. Sure, they may be a little creaky and may not be as attractive as they once were, but it's a far better investment to repair a proven performer than to sink money into a new window that only has a 20 year warranty at best. With proper maintenance your antique windows should last another 100 years.

Replacement windows are most often set into the original window opening, and the sash is smaller than the original sash. You get less viewing area and less light. Who wants less light? Replacement windows have a rigid structure that fits within your window openings. Old houses move and shift over time and frequently the gaps that open up around replacement windows and the window openings result in more drafts that the original windows.

#### The Green Choice

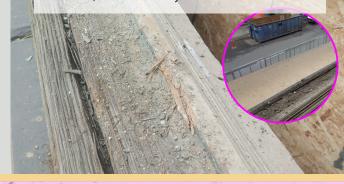
Replacement windows are touted as a way to save energy. But when evaluated from the perspective of the entire production, shipping, installation and removal process replacing windows consumes a whole lot of energy, or viewed the other way an older building has a great deal of embodied energy. If the total energy expenditure to manufacture replacement windows is considered the break even period stretches to 40-60 years. **Wood window restoration has considerable advantages!** 

## **Restoration Process**

#### Repair and Restoration

Our approach to window restoration is simple. Re-use what is usable, consolidate, repair, and strengthen. It is not only what your windows look like on the surface, it's also what is under the surface. Your windows need to be structurally sound as well. We provide a consistent approach in the way we repair and restore windows. Some areas of restoration and repair are dry rot, wood damage, broken glass, glazing, operational issues, and more. We have lowered the cost of restoration by restoring as a process. We like to see what is under the paint by dipping and removing the paint off the sash so we can then do repair in a production style fashion, rather

than one sash at a time. This method provides consistent, strong, restored sash at a lower cost. After the old paint has been removed and the sash has been repaired, sanded, kerfed for weatherstripping, freshly painted, and hardware installed you end up with an old quality window with a new finish that's beautiful, rich with character, and historically accurate.











#### Reproduction

Whether you need a sash, mill work or a complete operating window, Chosen can reproduce exact dimensions and profile to match any existing window. We are "old school" when it comes to technique and skills for reproduction and re-glazing. We rely on the work of our skilled craftsman to produce reproductions to exact specifications while quality is never being overlooked. What makes our reproductions so valued is our attention to detail and end results that are built to stand the test of time.

# Vintage Windows Solutions



Our company recognizes that, if given the option, building owners would rather keep their vintage wood windows than replace them. Vintage windows are made of long-lasting, quality materials that — with some T.L.C — add value and charm to the structure. Vintage windows were made with excellent old-growth fir or cedar that are not available anymore. These windows have weathered over a hundred years with very little dry rot. They're worth keeping! Most owners also love the wavy glass of vintage windows.

#### Vintage windows do pose certain challenges:

- · Loss of heat and cold drafts through leaky windows
- Single pane windows that sweat and have little insulation power
- Water damage that leaks around and through glazing putty
- · Loose, rattling windows that don't operate
- · Outside noise that carries in around the sash



In the last decade, we have developed solutions to resolve all issues affecting vintage wood windows.

#### **Energy Efficiency**

Did you know that the average building can lose up to 30% of its heat or air conditioning energy through the windows? Our team understands how important it is to not only maintain your wood or vintage windows, but also be as energy-efficient as possible. We offer two great solutions called SLIP's and Conversions. We also offer weatherstripping services!

#### WeatherStripping

Weatherstripping is one of the most cost-effective ways to insulate. Weatherstripping reduces outside noise and tightens up loose window sash which in turn keeps the cold air out in the winter and cool air in during warm months. This helps maximize the energy use of air conditioning units.

#### **Doors**

We have solutions for wooden doors as well. We offer services such as weatherstripping, glass replacement, wood repair, dry rot repair, door adjustment, and glass insulation services.



# Vintage Windows: SLIP Revolution in Storm-Type Insulation

We developed an innovative and cost-effective way to retain your original vintage glass windows, while making them more efficient and saving you money. SLIPs (Slim Line Insulating Pane) are designed to update single-pane wood windows to modern standards. It's possible to add an additional pane to each sash, without removing or altering their original windows.

SLIPs are designed to maintain the beauty of your original windows, while protecting you from the elements and increasing the insulation power.



**Before** 

After

The Slim Line Insulating Pane is sleek, low profile addition to Single Pane Windows.



In terms of insulation power, SLIPs are similar to insulated glass conversions. Another key aspect is that SLIPs will ensure vour window sash remains fully operable, without the need to open two sets of windows as you typically get with storm windows. With SLIPs, vou'll retain full functionality without having to alter your vintage glass. SLIPs are highly effective, well designed and well-priced,

giving you superior value when compared to alternatives. Storm windows can be big, bulky and a hassle. SLIPs have a sleek look and feel with a low profile that blend into the sash; you'll hardly know they are there (see before/after photo).

#### Some of the benefits of the SLIP™:

- Increased energy efficiency
- Sound reduction
- Far less cost than window replacement
- Maintains original beauty and charm of existing windows
- Windows can stay historically accurate and made functional again
- Solid, well-designed construction and material
- Tested and proven product

#### Vintage Windows: Conversions

Conversions are also ideal for those looking to get more insulation power from their existing windows and maintain the original millwork. This process involves the removal of the existing pane of glass and routing out the sash to accommodate insulated glass. This will give consumers the advantage of insulated glass which, itself, comes with many advantages including the option of higher energy-efficient Low-E alternatives and argon gas. Since conversions do involve routing out the glass, it is limited to windows that are not true divided lights.

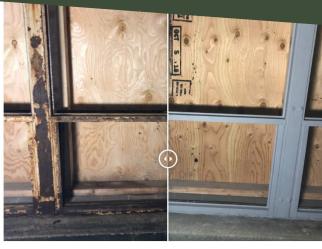
## **Steel Window**

Steel Windows make up a large quantity of vintage windows and are a major portion of windows in historic structures, especially in industrial commercial buildings. Structures that have steel windows are very distinct, often with a lot of strong character. Replacing, rather than restoring, these windows can make the building look out of sorts if replacement windows are not of a similar era or style. Keeping and restoring your windows can be a viable option for your building and your budget.

#### Steel windows carry a lot of benefits...

Steel windows are strong! This means that these windows are very durable and the material can last ages. Steel has become the standard material when it comes to strong building products. You'll find steel components as the centerpiece material when it comes to building the tallest and most robust structures in the world. While strong in structure and material; steel windows, just like wood windows can succumb to the elements and show signs of deterioration. The good news is that, like wood windows, this deterioration can be remedied. Small deterioration such as surface rust can be ground and refinished. More major components and sections can be removed and spliced with compatible products.





Vintage windows are extremely strong in structural integrity. The windows built with strong rolled steel can provide an extra sense of security for building owners. Both security in the the build of the window and also security in protecting your valuables in your structure and keep unwanted people out!

Steel windows can be efficient. These windows won't easily sag and droop unlike some other building materials. The components holding the windows in place may need time to time maintenance but the steel material won't sag. This means that the steel windows will keep in square as long as the windows were originally fitted correctly. As a result, the windows are less likely to create drafts overtime and changes in the fit of the sash in the frame. The insulation of the window also can be improved with upgrades to single pane glass.





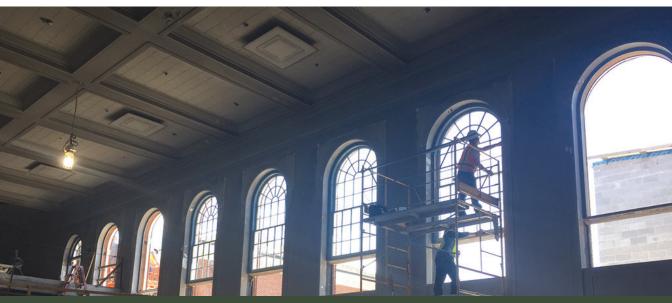
#### Historical Buildings: Preservation

Wood windows and their functional and decorative features are of utmost importance in defining a building's overall historic character. Our mission is to never jeopardize that, but to only have products and solutions to improve upon it. Chosen Wood Windows provides full service project management to achieve your historical restoration project goals within the standards set forth by the Secretary of the Interior's Standards for the Treatment of Historic Properties. We aim to protect and maintain original fabric and features of the overall window and building. We can conduct an in-depth survey of the existing windows and give all the options available. It starts with planning. We catalog all windows in the building making sure sash return to their original place and also regain authentic seamless operation.

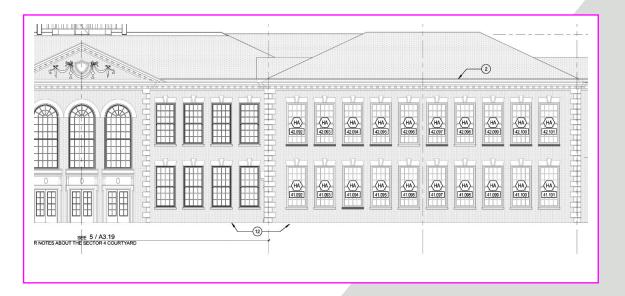


Our services are start to finish, from pulling sash to finish paint and reinstallation. The process for restoration at our shop starts with dipping and stripping decades of paint off the window sash to give the sash a fresh start and identify past repairs. Much of the time the glass is removed and re-set. You'll always be provided a beautiful and historically accurate end product.

We have completed over 40 historical preservation projects to date, including the Oregon Supreme Court House Building, University of Oregon Gerlinger Hall, Portland Center Stage and many more.



### Resources



Many things may dictate the level of restoration you may desire such as current window conditions, cost, energy efficiency, timing, the governing historical board and more. We can work with you to tailor a restoration plan that meets your needs.

#### Items that we can provide prior to 100% drawings:

- ROM for preliminary project costs
- Window Surveys
- Help with specs in uncharted areas
- Value solutions for insulation, operation and more



## **Our Process:**



We provide complete project services, start to finish, such as:

- Catalog window sash in opening and catalog repair
- Pull, infill and transport for shop restoration
- Dip & strip to remove paint
- Repairs, reproductions, restoration
- Options for energy efficiency and operation
- On site installation
- Project scope complete to punch list

# Safety & Compliance

Our restoration and repair program is focused on the EPA's Lead Renovation, Repair and Painting Program (40 CFR Part 745, Subpart E) and OSHA's 29 CFR 1926.62 in order to properly train and protect our workers, contracted employees, and the public from a health & safety standpoint. Therefore, Chosen Wood Window Maintenance is not a lead abatement contractor. Our program includes employing staff that are experienced at carpentry, painting, glazing, performing maintenance repairs and restoration.

As outlined in the OSHA 'Lead in Construction' document and the standard, we have noted the areas of significance below that our program includes:

1) Hazard determination, including exposure assessment; 2) Medical Surveillance and provision for medical removal; 3) Job-specific compliance programs; 4) Engineering and work practice controls; 5) Respiratory protection; 6) Protective clothing and equipment; 7) House-keeping; 8) Hygiene facilities and practices; 9) Signage; 10) Employee information and training; 11) Recordkeeping.



We satisfy the OSHA regulations by providing training, PPE, and medical surveillance. With our program, we include exposure monitoring, blood lead testing, recordkeeping, and respiratory protection. The RRP Checklist is utilized for pre-renovation and project set-up, and post-renovation cleaning as this is appropriate for our work practices and methods. Our Lead Management/Compliance Plan is detailed, comprehensive, and covers our work at Chosen Wood Window Maintenance.

All of the compliance information is discussed in our Lead Management/Compliance Plan. The plan is designed for how we manage lead renovation and restoration projects, manage lead paint and debris, and manage our work practices, etc., whether the projects are limited in scope or more detailed. Compliance, safety, and customer satisfaction are our top priorities at Chosen Wood Window Maintenance.

## A FEW OF OUR PAST PROJECTS



The Armory Portland, Oregon



Belle Court Apartments Portland, Oregon



Benson Hotel Portland, Oregon



St. Edwards Lodge Seattle, Washington



McMenamins Crystal Hotel Portland, Oregon



Fort Vancouver Vancouver, Washington



Franklin High School Portland, Oregon



UO Gerlinger Hall Eugene, Oregon



Vintage Plaza Hotel Portland, Oregon



Merchant Building Portland, Oregon



Pacific NW College of Art Portland, Oregon



Owens Adair Senior Housing Astoria, Oregon



Pine Street Market Portland, Oregon



Redmond City Hall Redmond, Oregon



Oregon Supreme Court House Salem, Oregon





"As a project Manager for the University of Oregon, and having used Chosen Windows on a number of Historic renovations on campus, I can heartily endorse Chosen for their both quality of work and systems they employ. My first experience with Chosen was on Fenton Hall (1906), where the original windows were removed, stripped, repaired as needed, and retrofitted with insulated glass units for energy efficiency. The windows were reinstalled and after five years of use we have not had one call back."

George Bleekman
Owner's Representative
Capital Design & Facilities Management

#### Its Simple

Repairing your old windows will save you money. Why replace them when you can maintain the charm of your structure in a cost-effective way? More often than not, replacing windows is a poor economic and environmental decision. Most wood windows can be restored and upgraded to rival the performance of a standard replacement window — at a fraction of the cost. Although wood windows feature drawbacks such as broken glass, poorly operating sashes, wood damage, worn sash and sills, and years of paint, Chosen Wood Window Maintenance can resolve all the issues which will result in a reliable, sound, operational and energy efficient wood window. Have us look at your upcoming project!

Please give us a call at (503) 266-3830 or (888) 317-7584

or find us online at www.chosenwwm.com